Oregon Business Review

Vol. VIII APRIL 1949 No. 4

Facilities of Astoria, Oregon Port District Surveyed*

Astoria, named for John Jacob Astor, is the county seat of Clatsop County and the first permanent settlement in Oregon. The city is situated approximately ten miles from the point where the Columbia River empties into the Pacific Ocean. Because of its commerce and industry, as well as its geographical location, Astoria has grown from a trading post to an important port. The economic bases of the city and its immediate hinterland consist chiefly of fishing, lumbering, dairying, and general agriculture. The principal manufacturing output includes salmon, tuna, and bottom fish products, lumber, flour, dairy products, grass seed, bulbs, and medicinal oils, vitamins, and other fish by-products. An ever-increasing tourist trade is enjoyed because of the close proximity of the Clatsop beaches. The 1940 census gave the population of the city as 10,339. A 1948 estimate places the figure at 20,000.

During the months from April to August, inclusive, the prevailing winds in the vicinity of Astoria are from the northwest; for the remainder of the year, southwesterly winds prevail. On the coast, northwest winds of high velocity, sometimes developing into gales which last several days, are not infrequent during the summer months. In the winter months severe southwest gales may occur at any time and are accompanied by a heavy southwest swell.

Fogs are most frequent on the Oregon coast during the months of July, August, and September. They may be dense, extend many miles seaward, and, during the months of greatest prevalence, frequently continue for many days.

The average annual precipitation at Astoria is 77.24 inches, most of which occurs in the months from October to May, inclusive. Snow does not fall in substantial amounts in the areas drained by the lower Columbia River. The mean minimum temperature at Astoria for a period of 32 years is 45.4° F, while the mean maximum temperature for the same period is 57.9° F. The Columbia River is virtually ice-free throughout the year.

The mean range of tide at the mouth of the Columbia River is 7.5 feet. Extreme tidal range is about 12 feet. The velocity of the current varies in the entrance of the river; on a flood tide it seldom exceeds 2 knots, but sometimes attains 5 knots during an ebb tide. This is due largely to the strength of the river discharge, since the velocity of the tide alone is 2.5 knots at either flood or ebb. Above the mouth, the velocity of the current varies from 1 to 2 knots, except during the freshet period, when it is con-

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* The research on this study was done by John Taylor of the Bureau of Business Research of the University of Oregon.

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Current Business Trends in Oregon.

Portland and U.S. Department Store Sales Compared

FILE COPY
Bureau of Business and Economic Research

By CHARLES L. SAUVIE*
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Department-store sales in Portland were higher in 1948 than in any previous year. This is true also of department-store sales for the whole United States; but the relative increase in sales, since 1940, for the United States is not so great as for the city of Portland (see Chart I).

Department-store sales have long been used as an indicator of general business activity. These sales seem to have the same peaks and troughs that one finds in the cycles of general business activity. As can be seen in Chart I, department-store sales followed rather closely the variations in income payments during the years for which income payments are available. Income-payments data are reasonably comprehensive measures of business activity. But such data for Oregon are available only on an annual basis about nine months after the end of the year; department-store sales, however, are available monthly and are therefore used as more current indicators of the general level of business activity.

During the World War II period both department-store sales and income payments rose rapidly, but department-store sales increased to a lesser extent than did income payments. By 1946, United States department-store sales and income payments were again at similar levels, while Portland department-store sales were still relatively below Oregon income payments.

The fact that, since 1940, the proportional increase in Portland department-store sales has been greater than for the United States as a whole is the result of the growth of war industries in the Portland metropolitan area, which brought a large influx of people to live in and around Portland. Most of these people, and those who have come since the end of the war, have been able to find employment in the Portland area in spite of the termination of war-induced demand. Thus, income payments have been kept at a proportionately higher level in Oregon than in the United States. This higher level of income payments in turn has made it possible for Portland department-store sales to have increased proportionately more since 1940 than those of the United States.

It should be remembered that the present large volume of department-store sales, both for Portland and the United States, is partly explained by the spiral of rising prices, since sales are stated in dollars and not in physical terms.

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* This is the seventh in a series of articles on Oregon economic development prepared by graduate students under the direction of Dr. Paul W. Ellis, associate professor of economics, University of Oregon.

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Bureau of Business Research, School of Business Administration
University of Oregon

WESLEY C. BALLAINE, Editor

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Portland and U.S. Department Store Sales Compared

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As one might expect, department-store sales have a large seasonal variation. In fact, the seasonal variations have more influence on the amount of department-store sales at any particular time than do the cyclical, irregular, or long-range trend variations. This can easily be seen from Charts I and II. Within any one year the variations that form a part of the seasonal pattern, as shown in Chart II, are much greater than the irregular variations; and the seasonal variations are much greater than those due to cyclical trend variations during the same one-year period, as shown in Chart I. In other words, if one were attempting to forecast department-store sales for any future month, it would be more important to know the seasonal pattern than either the general trend or the existing cyclical conditions.

The seasonal pattern in department-store sales starts from a low in January and reaches a peak in December, from which it falls to another seasonal low in the following month. During the year there are usually three peaks, each higher than the previous one. These are associated with Easter, the opening of the school year in the fall, and Christmas. However, this pattern should not be confused with the upward movement of department-store sales during recent years; for, even though the cyclical movement of department-store sales were downward, the seasonal pattern would still build up to a peak in December only to be followed by a drop in January.

The seasonal pattern of Portland department-store sales is similar to that for the nation as a whole. The only marked difference between the pattern for Portland and that of the United States is in amplitude. However, for the United States November and December sales show a large proportionate increase over the previous months than is shown in the Portland sales. This would seem to indicate that Christmas buying is relatively lighter in Portland than in the United States as a whole, at least in recent years. In other words, Portland's seasonal peaks are relatively lower and the seasonal troughs higher than those of the nation as a whole.

Chart III appears to indicate that both Portland department-store sales and, to a lesser extent, United States department-store sales are declining, at least temporarily.[1] Because of the close correlation between the cyclical trend of Portland department-store sales and of Oregon income payments, Portland department-store sales may be interpreted as a rough indication of the course of general business activity for the state.

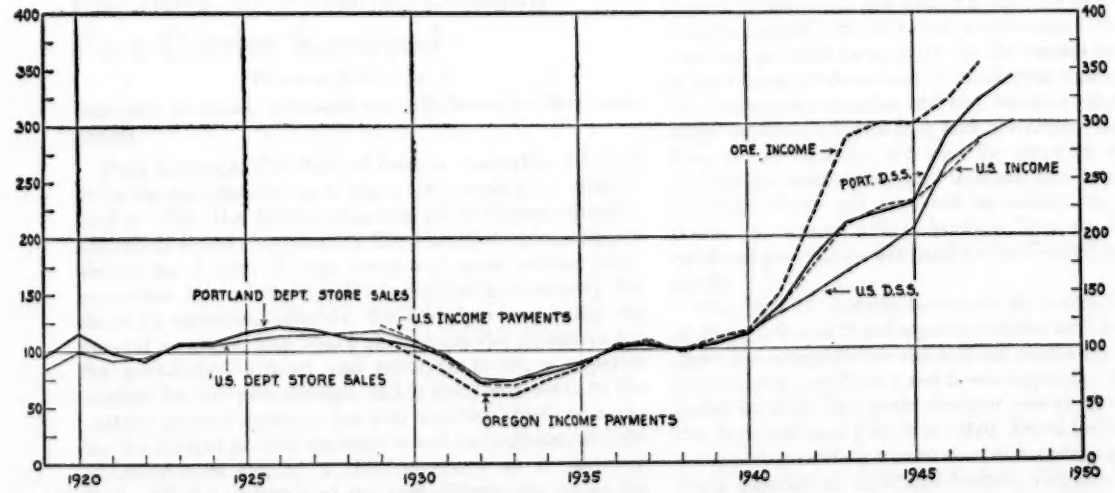
Since forecasting is a complicated and by no means exact procedure, there are hazards involved in the average businessman using department-store sales in an attempt to predict future business conditions; but, by comparing the activity of his own business with department-store sales, a businessman can tell roughly how his business is doing currently in comparison with the level of general business activity. If, for example, his own business is below the level of general business activity, it may be that his firm is losing out to other firms in the same line of business, or it may be that the industry as a whole is falling behind the activity of business in general. His actions would differ, of course, depending on which of the two above conditions applied.

If the seasonal pattern of one's business is similar to that

[1] EDITOR'S NOTE: This statement is based in part on data too recent for inclusion on Charts II and III. The unadjusted January index for the United States is 227 and the February index for Portland is 247 (supplementing Chart II). The adjusted January index for the United States is 288 and the February index for Portland is 264.

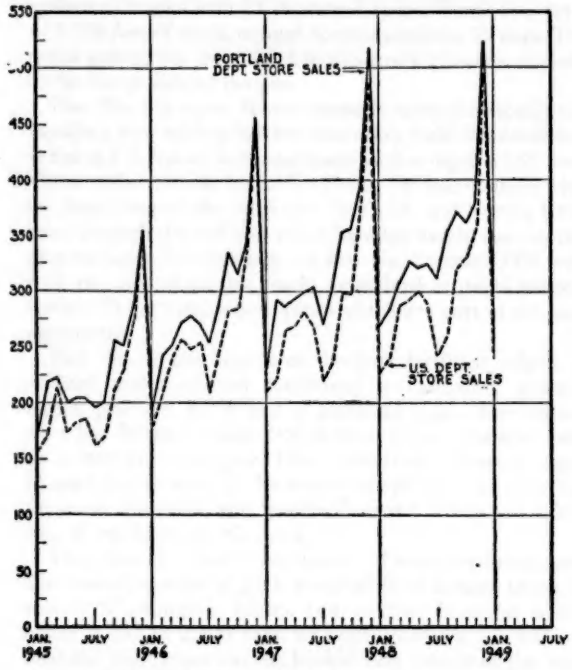
CHART I. DEPARTMENT-STORE SALES IN PORTLAND AND THE UNITED STATES, COMPARED WITH INCOME PAYMENTS IN OREGON AND THE UNITED STATES*

1935-1940 = 100



* Sources: Department-store sales, Federal Reserve System; income payments, U. S. Department of Commerce.

CHART II. MONTHLY DEPARTMENT-STORE SALES IN PORTLAND AND THE UNITED STATES, UNADJUSTED*
1935-1939 = 100



* Source: The Federal Reserve Banks.

of department-store sales, one can use the unadjusted department-store indexes as a basis of comparison. However, if the seasonal pattern is known to differ from that of department-store sales, the seasonally adjusted indexes, as shown in Chart III, would probably be more useful.

In using month-to-month data it is important to recognize that a decline of one or a few months is frequently followed by increases. Accordingly, a movement of department-store sales during a period of several months is more indicative of the current trend of business activity than a single isolated monthly index.

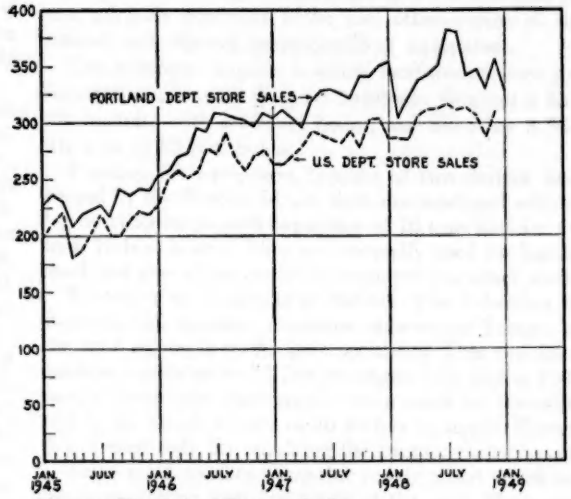
Facilities of Astoria, Oregon Port District Surveyed

(Continued from page 1)

siderably increased, although not sufficiently to affect navigation.

Port District. The Port of Astoria (hereafter referred to as the port district) is a municipal corporation authorized in 1909; the district embraces all of Clatsop County. Control is vested in a board of five commissioners, who are elected for a term of four years and serve without compensation. One of the board's functions is to employ the district's operating officials, the principal one being the general manager. The board also selects the managers for the port-owned airport and mooring basin, a superintendent for the port dredge, and a chief engineer. In the past the general manager has also been the chief engineer; but the present general manager is not an engineer, and the commissioners employ a chief engineer on a part-time basis. All the activities of the port district are under the

CHART III. MONTHLY DEPARTMENT-STORE SALES IN PORTLAND AND THE UNITED STATES, ADJUSTED FOR SEASONAL VARIATION*
1935-1939 = 100



* Source: The Federal Reserve Banks.

direct supervision of the general manager. The port district levies a tax which is now used only to service an outstanding bond issue. However, if shipping continues as slack as it has been since the war, additional funds from taxes may have to be obtained to cover the costs of maintenance.

Facilities. The bulk of the facilities at the port are located at Smith Point. The port district owns 8,840 feet of waterfront at this place and has developed approximately 2,300 feet of its holdings through the construction of terminals. The remainder of the port area is owned by private individuals, corporations, the railroad, and the city. The Chamber of Commerce advertises "free plant sites on a deep-water harbor, with railroad trackage available to firms showing proof that worthwhile payroll producing industries will be established."

There are 42 piers and wharves in Astoria. Three of these are owned by the port district, and are equipped to handle general cargo and grain in foreign and domestic trade, receive petroleum products, and supply fuel oil to vessels. Twenty-one are used for the receipt of fish, some being equipped with canneries and storage facilities. Three wharves are used exclusively for the receipt and shipment of petroleum products and for bunkering small vessels. One handles marine supplies and also bunkers small craft. Another receives hogged fuel and petroleum for plant use. Four of the wharves are used for mooring small vessels and harbor craft; grain and feed are also received on one of these. Three are operated in connection with repair plants and one as a ferry landing. Two are for handling sand and gravel, two are used by the Coast Guard, and one is idle.

The Port of Astoria terminals at Smith Point consist of Piers 1, 2, and 3 and a grain elevator and flour mill. The piers are adequate for the normal commerce of the port. Construction on Piers 1 and 2 was begun in 1913 and completed in 1915. The grain elevator was completed in 1918, the flour mill and Pier 3 in 1920. These facilities are well equipped, providing transit shed and storage space, a bulk-grain capacity of 1,250,000 bushels, shipside trackage, oil

bunkering, facilities, and numerous other services.

Pier No. 1 provides 1,753 feet of berthing space with a depth of 36 feet. The transit sheds have a total of 186,300 square feet of floor space and are served by a herringbone system of tracks with 11 depressed spurs. There is a total of 2,725 feet of track, enough to accommodate 72 cars. The grain gallery for the port district's grain elevator extends to the lower side of the pier.

Pier No. 2 is open. It was formerly used principally for handling and storing lumber and other bulk commodities. It has 3,177 feet of berthing space with a depth of 35 feet. Three surface tracks located on the upper side connect with the main line of the Spokane, Portland, and Seattle Railroad through the belt line which handles freight cars on the pier trackage. The trackage on Pier No. 2 totals 6,000 feet, with two sets of double tracks (standard railroad gauge) for the 35-ton locomotive cranes which are part of the pier equipment.

Pier No. 3, the largest of the port facilities, which is utilized under normal conditions for handling general cargo, provides 4,176 feet of berthing space. The transit shed has 248,000 square feet of floor space; it is also used as a storage warehouse. One 1,800-foot depressed track located in the rear of the transit shed connects with the Spokane, Portland, and Seattle Railroad. There are 1,500 feet of trackage on this dock.

The grain elevator is constructed of reinforced concrete. The annual amount of grain received from eastern Oregon, eastern Washington, Idaho, and western Montana is between 2,300 to 2,500 cars, or approximately 3.5 million bushels. Bulk grain can be loaded into vessels at the rate of 16,000 bushels per hour by means of a single-belt grain gallery equipped with one loading spout. The elevator has a depth of 36 feet alongside. An average of four cars or 60,000 bushels per hour can be unloaded from cars to the elevator through four car pits, each equipped with power shovels. There is no equipment for loading grain from elevator to cars, or unloading from ship to elevator. No shipments of wheat have been made for several years; the elevator is now used exclusively by the flour mill. Equipment of the elevator includes cleaners, smutters, drier, washers, and bagging machines, all electrically operated.

The flour mill is leased by the port district to the Pillsbury Milling Co. It specializes in grinding the better grades of bakers' flour which, in normal times, is shipped to the western United States market by rail. At present, however, the bulk of this flour is being purchased by the government for shipment to the Orient. The mill has a daily capacity of 4,000 barrels.

Minor activities of the port district include the operation of a small suction-type dredge, the maintenance of a mooring basin for small fishing craft, and the operation of the Astoria airport, considered to be one of the most modern on the Pacific Coast. The airport cost over $15 million to build and can handle the largest passenger planes now in use.

A new mooring basin to provide additional small-boat facilities is scheduled for construction in the first part of 1949. It will be financed largely by the Federal government, with the city, county, and port district supplying the remainder of the money. The Federal government's share will be the construction of a breakwater.

The only shipside tracks are the belt-line tracks at the Port of Astoria terminals, but the Spokane, Portland, and Seattle Railroad parallels the waterfront for its entire length.

The larger facilities, principally the port terminals, are equipped with tractors, electrically operated stackers, loaders, portable conveyor belts, and other forms of economical and efficient cargo-handling equipment.

The principal shipside hoisting facilities are two steam locomotive cranes at the port terminals. One has a 35-ton lift capacity with a 55-foot boom, and the other a 50-ton lift with an 85-foot boom.

Floating lift equipment consists of two derrick barges owned by the Brookfield Co. Both are equipped with stiff-leg derricks having lift capacities of 10 tons and are fitted with 75-foot booms. They are normally used for handling sand and gravel but could be employed for other work.

There are no drydocks at Astoria. The Columbia Boat Building Co. operates a marine railway on Youngs Bay, the inlet adjacent to the port terminals. This can accommodate vessels up to 71 feet in length. The Union Fisherman's Cooperative Packing Co. has a small marine railway which can handle vessels up to 45 feet in length. However, this is used only for repairing the company's own vessels.

There are a number of marine repair plants which serve the large fishing fleet that bases at the port. These plants are prepared to undertake repairs to vessels when this does not necessitate hauling out or when the work to be done is above the water line.

There are no prescribed anchorage grounds off Astoria. Satisfactory anchorage is found just above Astoria and west of Tongue Point on both sides of the main channel.

Port Services. Both river and bar pilots maintain offices at Astoria, although the river pilots' main office is in Portland. Bar pilots do not engage in pilotage upon the river, nor river pilots in pilotage through the jetties at the mouth of the river. A bar pilot brings the vessel to Astoria, and a river pilot is employed for the remainder of the trip.

There are no stevedoring firms in Astoria. Walking bosses and longshore gear are sent down by Portland stevedoring companies, but the "gangs" are obtained through local hiring halls.

The companies engaged in general towing and lighterage at Astoria have numerous towboats and barges of varied horsepower and carrying capacities. Firms with headquarters in Longview or Portland also operate at Astoria; they do not have equipment regularly assigned to the port, although some do maintain local offices. In general, the firms located on the Columbia or Wilamette rivers will handle towing and lighterage work anywhere on the navigable portions of those streams and their tributaries.

Both naval and marine radio stations are located at Astoria.

The only docks regularly supplying electric current to vessels are the port piers. Operators of the smaller docks occasionally supply current to vessels as an accommodation.

The city water system reaches all sections of the waterfront. The rate of delivery at the several wharves varies from 20,000 to 68,000 gallons per hour, according to the number and size of hose connections. The water is excellent for both drinking and boiler purposes, and is available in unlimited quantities.

One of the oil companies supplies bunker oils to large vessels. It operates over the outer end of the Port of Astoria Pier No. 2, where there are 425 linear feet of berthing

space with a depth of 35 feet at mean lower low water. This company has four tanks with a total capacity of 88,000 barrels located immediately back of the pier, and bunkers through 12-inch and 8-inch lines at a rate of 2,000 barrels per hour. Three oil companies maintain their own dock facilities for bunkering fishing vessels and other small craft.

Because of the very limited demand for coal bunkering, the only facility is the crawler crane operated off the open end of the City Lumber and Supply Co.'s wharf. The storage capacity is 500 tons; the coal is primarily for local distribution.

Most of the dock owners and operators have some fire-fighting equipment, and a few of the tugs at the port have pressure pumps. The city maintains an efficient fire department and, in addition, the Coast Guard has one fire-boat station. The port terminals are well equipped with fire-protection equipment, a part of which was installed by the Navy during the war, when it occupied the piers.

The Federal government maintains a number of services commonly found at seaports. Officers of the Public Health Service in charge of enforcing quarantine regulations on the Columbia River are stationed at Astoria. There are both customs and immigration stations in Astoria; however, in view of the small number of immigrants entering the Columbia River, no regular detention station has been established in either Astoria or Portland. There is a Coast Guard cutter station, a lifesaving station at Hammond (at the very mouth of the river), and a lighthouse depot.

With the exception of a fairly heavy traffic in log rafts and small quantities of oil brought by barge from Portland, there is virtually no river commerce.

Revival in general cargo business at Astoria depends upon the revival of the American shipping industry. If and when this does occur, Astoria should share in it—because the port has excellent facilities, a growing population in the city and its hinterland, and a good geographical location. The very fact that Astoria had a large voluume of business in the past should indicate that it will again, if shipping becomes more active.

Present Activity. Shipments of lumber are made principally from the mill docks in the near-by communities of Westport, Wauna, Warrenton, and Bradwood. The present volume of water shipments of lumber from the Astoria area is about normal.

The shipments of flour are also about normal except that nine-tenths is now shipped abroad, whereas prior to the war nine-tenths was shipped to domestic ports.

General cargo shipments by water in the coastal and intercoastal trade of the United States have declined severely as compared to a decade ago. It is quite natural that such declines should be reflected in the volume of business handled in a port such as Astoria. In fact, smaller ports have suffered relatively more than larger ones, since the tendency has been to eliminate completely those ports for which there is comparatively little business. The possibilities of changes in this situation in favor of the water carriers is beyond the scope of this study.

Prior to the war, Astoria handled an average of better than a ship a day in coastal and intercoastal traffic. It is said that there has been no general cargo shipped out of Astoria by water to the Atlantic Coast for eighteen months and no coastwise shipping since the end of the war. This has resulted in an almost complete lack of activity in the Port of Astoria terminals.

Petroleum and its products currently constitute the most important type of cargo discharged in the port. Oyster seed for planting in the Tillamook and Willapa Harbor oyster beds is received from Japan, and there are a few small shipments of frozen tuna, which come in from Central and South America for the local canneries. Outgoing frozen and canned fish, formerly major items, now move entirely by rail.

Power for Small Sawmills

Economical power for small sawmills through the use of two standard automobile engines is discussed in a report available from the Office of Technical Services of the Department of Commerce.

According to the report, the typical portable sawmill, working in forest areas of limited growth, requires power slightly greater than that obtained from the stock automobile engine. Inadequate power results in reduced capacity, waste of manpower, and much waste of good lumber. However, stock automobile engines are used by small sawmills because they cost considerably less per horsepower than specially built industrial engines of higher output.

The report indicates that a satisfactory power plant of higher capacity can be obtained by mounting two automobile engines one in front of the other on a suitable frame, both supplying the same layshaft through flexible V-belts, and both controlled and governed simultaneously.

Construction of an actual working model, which was run in sawmill tests, convinced the investigators of the practicability of the dual power plant. The basic design and construction of the plant are described in detail and illustrated by drawings and photographs.

The purpose of the investigation was the development of an economical power system that could be built by the sawmill operator himself, with locally available materials and labor. To this purpose, the report includes detailed instructions and diagrams explaining the assembly of the dual-engine plant. Also included are recommendations for further tests and studies of the plant's operation.

Contracts for manufacturing buildings awarded in the eastern sections of the United States aggregated $147,605,000 in the first three months of this year, a 19 per cent drop from the total of $181,240,000 reported for the corresponding period of last year. The figures do not include machinery or equipment used in manufacturing. The decline was attributable to sharp drops in the rate of awards by the chemical, food-products, and textile-processing groups, and by declines in the iron and steel, lumber and woodworking mechanical groups. All other major processing and mechanical industries showed increases in building contracts awarded. Awards in the paper and pulp group, among petroleum processing and refineries, automobile and aircraft industries, and in the stone, clay, and glass-products industries were up substantially.

CURRENT BUSINESS TRENDS IN OREGON

Unemployment-Compensation Payments. Payments to persons unable to find jobs reached $10,967,347 during the first quarter of 1949. This was a new quarterly high, and was more than was paid out during the first ten months of 1948. However, new claims taken in by local offices of the State Unemployment Compensation Commission dropped steadily throughout March as employment began to pick up.

Slightly more than 43 per cent of the first-quarter payments went to employees laid off by logging and lumbering concerns. Related to this concentration of unemployment compensation to employees of the lumber industry is that fact that payments outside of Portland accounted for two-thirds of all payments, whereas in the winter of 1946 (the previous high unemployment period) they accounted for but 40 per cent.

The number of compensation claimants during the third week of March are shown in the table below (the figures for selected cities are shown separately):

Industry	*Total*	*Portland*	*Eugene*	*Salem*	*Klam. Falls*	*Coos Bay*	*Lebanon*	*Ore. City*
Agri., for., fish., & min.	210	53	26	19	9	4	2	5
Construction	4,134	1,816	228	339	117	73	88	181
Food processing	2,631	802	140	516	17	49	24	31
Logging & lumber	13,237	1,963	1,567	920	944	893	946	556
Other mfg.	3,902	2,884	42	208	42	42	21	191
Transp. & util.	1,605	799	70	78	65	57	45	48
Wholesale trade	1,196	566	71	79	38	19	9	23
Cafes	1,530	552	99	66	85	69	30	31
Retail trade	2,595	1,156	183	149	129	41	22	74
Finance, service & n.e.c.	2,054	1,027	135	129	73	45	35	48
Total	33,096	11,618	2,561	2,503	1,519	1,292	1,222	1,188

Lumber. Douglas-fir lumber production for the first quarter of 1949 fell well behind the output for the same period in 1948. However, many logging camps that were closed because of the severe winter are now in normal operation, and shipments of lumber showed considerable improvement in March over February.

Department-Store Sales. Portland department-store sales appear to be improving, relative to last year. The following table gives percentage changes in the value of department-store sales compared with the corresponding period a year ago. Sales in other Pacific Coast cities are included to show trends in neighboring metropolises.

City	*Week Ending Apr. 9, 1949*	*Calendar Year to Apr. 19, 1949*
Portland	+ 2	−8
Los Angeles	− 1	−9
San Diego	+ 3	−4
Oakland	+10	−4
San Francisco	+12	+1
Seattle	+ 4	−3
Spokane	+ 4	−7
United States	+ 7	Not available

Farm Wages. The Bureau of Agricultural Economics reports that on April 1, 1949, Oregon farm wages averaged $140 per month with board and room furnished and $175 per month with a house included. A year ago these figures were $144 and $172, respectively. It is interesting to note that the cash wages moved downward when room and board were included and upward when a house was included.

Oregon Shipping in 1948. During 1948, from January to December, 245 vessels entered Oregon ports and 188 cleared. Shipping was severely crippled for a quarter of the year by a strike of longshoremen, which prevented movements of vessels and loading and unloading. The labor troubles on the docks affected shipping all along the Pacific Coast.

Of the 245 vessels entering Oregon, there were 71 American flag ships with cargo and 99 in ballast. There were 47 foreign flag ships in cargo and 28 in ballast. Of the 188 vessels clearing, 118 were American in cargo and 5 in ballast, 55 foreign in cargo and 9 in ballast.

BANK DEBITS

Bank debits represent the dollar value of the checks drawn against individual deposits. Approximately 90 per cent of all goods, property, and services is paid for by check. Bank debits are regarded as indicators of the general trend of business, though their value for this purpose may be impaired by substantial changes in the level of prices. The Bureau of Business Research collects bank debits from 104 banks and branches monthly. On occasion, the totals for the same month in different issues of the *Review* are not directly comparable because of necessary adjustments in basic data.

Marketing Districts	*Number of Banks Reporting*	*Debits Feb. 1949*	*Debits Jan. 1949*	*Debits Feb. 1948*	*Feb. 1949 compared with Jan. 1949*	*Feb. 1949 compared with Feb. 1948*
Oregon	97	$712,018,308	$877,604,202	$820,866,105	−18.87%	−13.26%
Portland (Portland, Hillsboro, Oregon City, etc.)	27	449,767,386	545,464,224	523,891,508	−17.54	−14.15
Lower Willamette Valley (Salem, McMinnville, etc.)	10	58,878,784	69,506,122	62,726,849	−15.29	− 6.13
Upper Willamette Valley (Albany, Corvallis, Eugene, etc.)	14	62,206,375	80,175,016	77,567,676	−22.41	−19.74
North Oregon Coast (Astoria, Tillamook, etc.)	5	15,072,564	18,507,431	17,962,628	−18.56	−15.81
Douglas, Coos Bay	5	19,347,112	21,128,574	22,434,219	− 8.43	−13.76
Southern Oregon (Ashland, Medford, Grants Pass)	6	27,050,743	33,971,782	32,390,367	−20.37	−16.49
Upper Columbia River (The Dalles, Hood River, etc.)	7	11,776,287	17,419,284	11,615,519	−32.40	+ 1.21
Pendleton area	6	14,629,240	21,611,672	13,153,908	−32.31	+11.22
Central Oregon (Bend, Prineville, Redmond)	4	12,357,595	15,508,274	13,913,206	−20.32	−11.19
Klamath Falls, Lakeview area	4	19,906,179	26,570,245	23,121,854	−25.08	−13.91
Baker, La Grande area	6	13,394,632	17,495,630	14,392,005	−23.44	− 6.93
Burns, Ontario, Nyssa	3	7,631,411	10,245,948	7,796,366	−25.52	− 2.12

BUILDING PERMITS

Building permits give an indication of building operations planned rather than actual construction under way. Care must be taken, in interpreting these data, to allow for the lag which may elapse between the issuance of the permit and the beginning of actual construction. The data have been collected by the Bureau of Business Research.

	New Residential Feb. 1949	*New Nonresidential Feb. 1949*	*Additions, Alterations and Repairs Feb. 1949*	*Totals Feb. 1949*	*Totals Feb. 1948*	*Totals Jan. 1949*
Astoria	$ 4,000	$ 3,500	$ 22,670	$ 30,170	$ 56,600	$ 21,750
Bend	12,000	1,100	4,350	17,450	41,585	3,700
Coos Bay	12,500	1,400	9,400	23,300	54,900	43,800
Corvallis	———	———	8,330	8,330	33,300	5,117
Eugene	68,850	262,075	18,040	348,965	117,760	183,385
Grants Pass	32,560	11,020	6,575	50,155	148,395	42,886
Klamath Falls	7,000	———	10,340	17,340	127,168	6,450
La Grande	———	———	5,500	5,500	59,325	50
Medford	45,700	3,450	21,400	70,550	193,200	77,440
Oregon City	———	———	1,085	1,085	29,850	9,200
Pendleton	15,246	500	17,500	33,246	48,050	112.3[illegible]
Portland	1,094,250	1,345,880	581,560	3,021,690	2,515,265	1,818.5[illegible]
Salem	49,500	26,600	27,615	103,715	273,805	262,297
The Dalles	7,500	2,150	9,390	19,040	54,430	8,450
18 other communities	132,200	61,815	38,080	232,095	437,771	93,240
Totals	$1,481,306	$1,719,490	$ 781,835	$3,982,631	$4,191,404	$2,688,758